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ABSTRACT

This is one of a series of units for environmental education developed by the Highline Public Schools. This unit is designed for senior high school students who have a basic knowledge of nutrition and some experience in menu planning. The five lessons provide experiences in selecting, preparing, and storing foods to attain maximum nutrition with a minimum of food waste. Lessons are designed for the standard secondary school period of 45-60 minutes; the unit is designed to take about three weeks. Each lesson includes the concept of the lesson, materials needed, procedure, evaluation procedures, and suggested additional activities. The materials were tried and evaluated; evaluation data may be obtained from the Highline Public Schools. (RH)

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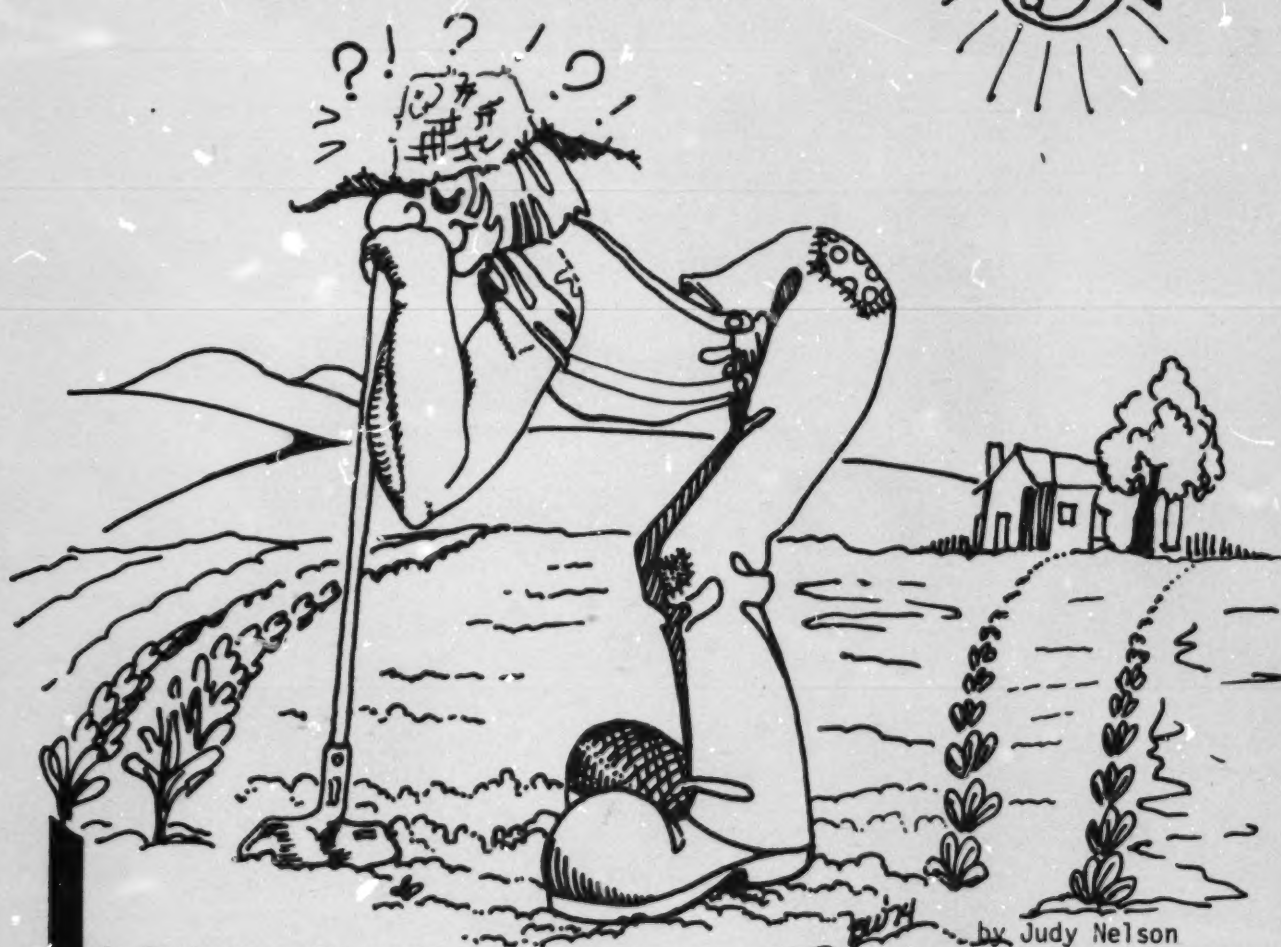
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NELSON

PAK

EVER STOP TO THINK

MAN'S SURVIVAL IS DEPENDENT ON HIS
USE OF FOOD RESOURCES ?



An Environmental Learning
Experience for advanced
foods at the senior high
level. One of many "ELE
Paks" available for all
areas.

by Judy Nelson

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SE 021 471

PROJECT ECOLOGY
EVERYTHING IS CONNECTED TO EVERYTHING ELSE

NATURE KNOWS BEST

PROJECT ECOLOGY
TITLE III

THERE IS NO SUCH THING AS A FREE LUNCH

PROJECT ECOLOGY
TITLE III

The Kids Who Participated in the Pilot Evaluation Program

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*Evaluation Results Regarding This ELE May
Be Obtained by Including This Page and a
Self Addressed Stamped Envelope To*

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PROJECT ECOLOGY
TITLE III
EVERYTHING MUST GO SOMEWHERE

BACKGROUND INFORMATION

WHY BOTHER TO THINK ABOUT IT? WE'LL ALWAYS HAVE ENOUGH....

As world populations continue to grow, the supply of nourishing food, especially high quality proteins, is in short supply. We must begin to treat our food resources with respect.

FOOD RESOURCES. ARE WE WASTEFUL? YES, THROUGH:

1. Poor food management in the home:
 - A. Preparing too much food for family meals creating leftovers - which are frequently discarded.
 - B. Purchasing "empty calories" to fill nutrient needs.
 - C. Preparing foods in ways that contribute to loss of food value.
 - D. Improper storage - causing food to spoil or lose color, flavor, and nutrients.
 - E. Preparing food of poor quality - unpalatable.
2. Be damaging the ecological balance through food related wastes - some of which are:
 - A. Purchasing excessive packaging
 - B. Not recycling food containers
3. The waste of human potential caused by undernourishment and malnourishment.

WE'VE ONLY STARTED TO IDENTIFY WAYS WE MISUSE FOOD RESOURCES.

In this unit we will deal with ways to improve food management to minimize waste of nutrients and waste of the foodstuffs themselves.

WHAT CAN BE DONE? WE HAVE THE RESPONSIBILITY TO LEARN TO:

1. Plan meals for maximum nutrition and minimum waste.
2. Store and prepare food to conserve food value and prevent waste and contamination.

ISN'T THIS JUST COMMON KNOWLEDGE?

No, food management skills are learned. We can and perhaps we must learn to make better use of the food resources we have.

NOTES TO TEACHER

This unit is designed for students who have a basic knowledge of nutrition and some experience in menu planning and who are ready to put this knowledge of nutrition to work in selecting, preparing and storing foods to attain maximum nutrition with a minimum of food waste.

Lead up and follow up units might be:

1. Nutrition review
2. Meal planning review
3. Roush Pak #1 - Food--The Challenge to Manage
4. Meat study
5. This unit

The lessons are designed for the standard secondary school period of 45-60 minutes. Some concepts take several days to develop and some ideas are left entirely to the student to develop. The final project involves a food preparation experience.

Since no standard foods text is in each school, I have relied on magazine materials and government publications. These materials can be dittoed for individual student use.

This unit is designed to take approximately 3 weeks where actual lessons and demonstrations occur. The third week is used for planning and preparing a meal using food management principles studied.

I like to put the concept for the day on an acetate for the overhead. Then assignments and extra credit can also be listed on the acetate. (Remember - it conserves paper!) This is a matter of personal preference. Assignments could be written on board. I have a place on my bulletin board for each class - their assignments and the due date is posted. Students who have been absent check the bulletin board first to see what work needs to be done.

CONCEPTUAL OVERVIEW

1. Food ecology - the whys
2. Good storage conditions slow down the loss and destruction of food values and retard spoilage.
3. The method of food preparation affects the retention of nutrients.
 - a. Nutrients in food vary greatly in their stability - measures that protect vitamin C usually protect other nutrients.
 - b. Trimming fruits and vegetables contribute to vitamin losses.
 - c. Vegetable cookery - reduce the amount of water, length of cooking time and amount of surface area exposed.
 - d. Special equipment is not necessary for the conservation of nutrients - and the material from which a utensil is made is not important is conserving nutritive value.

MASTER MATERIALS LIST
For Class of 25-30

1. Acetates: Food Facts
2 R's of protecting our environment
Ditto - one per student - Fact Sheet (optional)
2. Film - "Food for a Modern World" - ERAC
3. Some foods that have "had it" - preferably moldy fruit or bread
Something that is spoiling due to yeast - fruit juice
Something that is deteriorating due mainly to physical damage
Something that is deteriorating due to bacteria, such as sour milk
An overripe fruit or vegetable - deteriorating due to enzyme change
Perishable foods chart - U.S.D.A. Home and Garden Bulletin No. 378 (dittoed)
"Keeping Food Safe to Eat" - U.S.D.A. Bulletin No. 162 - one copy per student
would be ideal
"Smart Shopper Food Tip: Storage of Fresh Vegetables" - dittoed
Chalkboard or overhead, acetate, felt pen for overhead
Ditto of assignment No. 3

For teacher research - Nutrition Nonsense and Sense (included)

For student research - depends on how many are in class - 5-8 of each should be sufficient

- a. Guides to Goodness From Your Home Freezer
 - b. What You Should Know About Frozen Foods
 - c. Food Safety in the Kitchen
 - d. We Want You to Know About Protecting Your Family From Foodborne Illness
 - e. Salmonella and Food in Your Home
 - f. Facts About Food Poisoning
 - g. Cooperative Extension Service - 1 copy
 - h. Careers in F.D.A.
4. Assorted foods texts
Cookbooks
"Conserving the Nutritive Value of Foods", U.S.D.A. House and Garden Bulletin No. 90 - one per student
"Vegetables in Family Meals" U.S.D.A. House and Garden Bulletin No. 105 - 1 per student
Cooking utensils normally found in Home Ec. room
Pressure cooker
Microwave oven - order from district
Foods as determined by teacher
 5. A foods lab work plan for each unit
Foods as specified by students

CALENDAR

Day #1	Day #2	Day #3	Day #4	Day #5
Pre-Test	Discussion of concept #1 - "Foodecology- The Whys"	Continuation of Concept #1 Film - "Food for a Modern World "	Concept #2 Discuss assignment	Class research and work on assignments
	Lesson 1	Lesson 2	Lesson 3	
Day #6	Day #7	Day #8	Day #9	Day #10
Class research and work on assignments	Presentations	Presentations	Concepts (Lesson 4) 3. a b c d Teacher demo	Teacher demo
Day #11	Day #12	Day #13	Day #14	Day #15
Teacher demo	Lesson #5 Concept #3 Planning	Planning	Preparation	Post test and evaluation of lab

LESSON 1

- CONCEPT:** Foodecology - the whys
- MATERIALS:** Acetate with food facts - included
Ditto: one per student - fact sheet (optional)
Acetate with 2 R's of Protecting our Environment
- PROCEDURE:** Write "foodecology" on the board or on an acetate for the overhead projector.

The interdependence between living things and their environment is what ecology is about. What do we mean by interdependence? How does food fit into the overall picture of ecology? Most of you probably already have some ideas about this from studies in other classes, so let's review.

Do you know these words? (on acetate)

- A. Food web - discuss definition
- B. Food chain - discuss definition and give an example
- C. Food cycle - discuss definition

Man controls food chains to increase his food supply. Ask class for examples (may have to give hints) (domesticated animals)

Man is the end of most food chains. Since our wastes rarely support other life we must accept the responsibility to protect our natural resources. We are responsible for the survival of all living things.

Our food demands affect our environment - Man's search for food affects his environment. What could happen if man, for example, caused a certain kind of fish to become extinct over a period of years from commercial fishing? When one link in a food chain is broken, the rest of the chain is weakened. What might happen if a certain organism becomes extinct in a food chain?

Eating habits affect environment - How does our "disposable society" affect our environment? How much trash, litter, etc. is associated with food?

Can we turn back the clock? Can we go back to a simpler way of life? Most people, if they really consider these questions seriously will realize that you cannot go back. But how can we go forward? We haven't really done a very good job with modern technology so far.

**SUGGESTED
EXTRA
ACTIVITIES:**

Find ways to recycle and reuse items found in your home. Encourage family members to do the same.

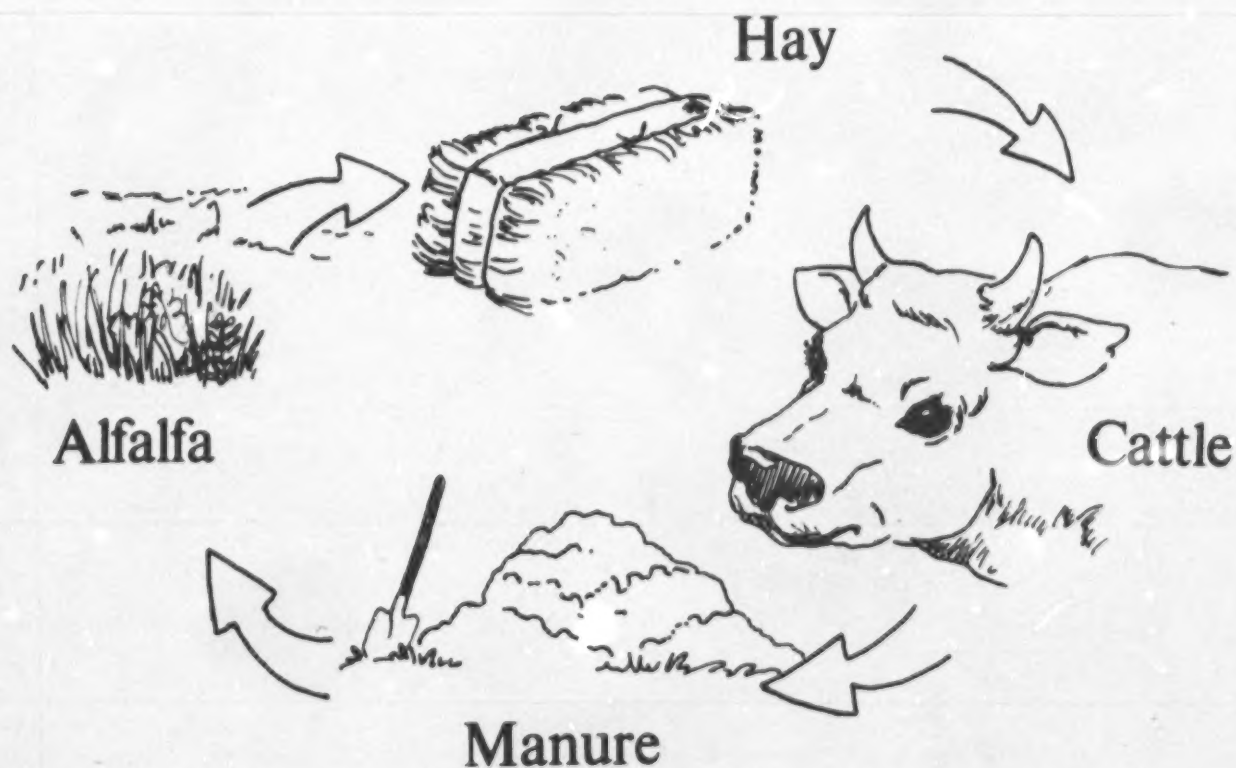
1. FOOD WEB

- A GROUP OF FOOD CHAINS THAT MAKE IT POSSIBLE FOR PLANTS, ANIMALS AND PEOPLE TO SURVIVE. EACH FOOD CHAIN IS MADE UP OF SEVERAL LIVING THINGS WHICH USE THE NEXT MEMBER IN THE CHAIN AS A FOOD SOURCE.

2. FOOD CHAIN

- OCCUR EVERYWHERE ON EARTH WHERE ORGANISMS PREY ON NEXT LOWER ONE IN CHAIN AS FOOD SOURCE. ALL LIVING THINGS ARE A PART OF AT LEAST ONE CHAIN AND MAYBE SEVERAL CHAINS. WHEN THE CHAINS ARE INTERLINKED THEY FORM FOOD WEBS.

3. FOOD CYCLE - CIRCULAR PATH - A FOOD CHAIN COME FULL CIRCLE



4. MAN - FOOD CHAINS

MAN DEPENDS ON FOOD CHAINS TO GET FOOD HE LIKES AND THAT HIS BODY CAN USE. MAN CONTROLS FOOD CHAINS TO INCREASE HIS FOOD SUPPLY.

5. MAN - THE END OF THE CHAIN

THE BUCK STOPS HERE!

- A. NO NATURAL ENEMIES
- B. MAN'S WASTE RARELY SUPPORTS OTHER LIFE
- C. WE ARE RESPONSIBLE!!



TWO R's OF PROTECTING OUR ENVIRONMENT

1. RESPECT OUR RESOURCES

- A. FOOD SHOPPING - PLANNING AHEAD TO BUY AND PREPARE ONLY THE AMOUNT OF FOOD WE NEED AND WILL USE. (ROUSH PAK #1)
- B. MAKE FULLER USE OF FOODS AVAILABLE TO US - LEARNING TO ACCEPT THE MOST NUTRITIOUS SOURCES OF FOOD.
- C. SUPPORT COMPANIES THAT ARE WORKING TO REDUCE POLLUTION BY BUYING THEIR PRODUCTS. REFUSE TO BUY FROM COMPANIES THAT ENDANGER AND POLLUTE ENVIRONMENT.
 - BUYING IN BULK INSTEAD OF PACKAGED FOODS
 - BUYING BEVERAGES IN RETURNABLE BOTTLES
 - OTHER EXAMPLES?

2. RECYCLE AND REUSE

- AMERICANS THROW AWAY EVERY YEAR
 - 48 BILLION CANS
 - 26 BILLION BOTTLES AND JARS
 - 65 BILLION METAL AND PLASTIC CAPS AND LIDS
 - \$500 MILLION - PLASTIC AND CARDBOARD PACKAGING
 - 360 MILLION TONS AND MUCH OF IT FROM FOOD

1. RECYCLING CENTERS

- 2. COMPOSTING - DECAYED PLANT AND ANIMAL MATTER USED TO ENRICH SOIL AND FERTILIZE GARDENS

3. NEW USES FOR BY-PRODUCTS OF INDUSTRY

- A. PETROLEUM - USED TO GROW YEAST
- B. CELLULOSE IN WOOD FOR ANIMAL FOOD
- C. FORMER WASTE PRODUCTS OF AGRICULTURE TO MAKE "MEATLESS MEATS"

4. NEW USES FOR GARBAGE AND TRASH

- CELLULOSE IN GARBAGE TO BE USED FOR ANIMAL FOOD
- SQUEEZING GARBAGE INTO SOLID BUILDING BLOCKS
- DECAYING WASTE, IN THE ABSENCE OF AIR, PRODUCES A GAS WHICH MAY BE USED TO PRODUCE POWER

5. CREATIVE RECYCLING

- 6. THE INDIVIDUAL - HABITS MUST CHANGE!

FOODECOLOGY FACT SHEET

1. Food web -
2. Food chain -
3. Food cycle -
4. Why should man feel responsible for protecting our natural resources?
5. The two R's of protecting our environment are:

6. Did you know?

Americans throw away every year:

48 billion cans

26 billion bottles and jars

65 billion metal and plastic caps and lids

\$500 million in plastic and cardboard packaging

360 million tons of trash and garbage - much of it from food!



LESSON 2

CONCEPT: Continuation of concept #1 - Foodecology - The Whys

MATERIALS: Film: Food for a Modern World - ERAC

PROCEDURE: *Yesterday we were asking the question, "Can we turn back the clock?" Can we go back to our grandfather's times - wouldn't that be best for the environment? Right now there seems to be a real push to go "back to nature". Give some examples. It seems like a very romantic notion to go back into time, but is it practical? Let's see. Show film.*

SUGGESTED

EXTRA

ACTIVITIES:

Write a letter to the American Freedom From Hunger Foundation. Why was it founded, what are its goals? Who are its members? What are its activities? Can you and the class participate in its activities?

Research different types of malnutrition (over-nutrition, under nutrition, unbalanced nutrition.) Make a class display.

Most girls are obsessed with looking thin. What are the dangers of under nutrition, especially in teen age years? How can under nutrition affect appearance, work and general health?

LESSON 3

CONCEPT: Good storage conditions can slow down the loss and destruction of food values and retard spoilage.

MATERIALS: Some foods that have "had it"

1) moldy fruit

2) bread

Something that is spoiling due to yeast

1) fruit juice

Something that is deteriorating due mainly to physical damage

Something that is deteriorating due to bacteria

1) sour milk

Something that shows enzyme change

1) an overripe fruit or vegetable

"How To Be a Better Shopper"

Perishable Foods Chart (article from July 1973 *Woman's Day* - which was taken from U.S.D.A. Home and Garden Bulletin 378) (Make a ditto)

"Keeping Food Safe to Eat" - U.S.D.A. Bulletin No. 162

"Smart Shopper Food Tip: Storage of Fresh Vegetables"

Chalkboard or overhead, acetate, grease pencil

Materials for student research - (Evaluative Activity)

1. Guides to Goodness From Your Home Freezer

2. What You Should Know About Frozen Foods

3. Food Safety in the Kitchen

4. We Want You To Know About Protecting Your Family From Foodborne Illness

5. Salmonella and Food In Your Home

6. Facts About Food Poisoning

PROCEDURE: *We've explored a little bit in the last 2 days the word foodecology in a very broad sense. (Might very briefly review - but not absolutely necessary.) Now let's explore foodecology in our homes.*

Foodecology in the home actually implies making the most of what you have - after you've planned and purchased the most nutritious foods possible. Your efforts are lost if you allow your food to spoil and lose nutrients through carelessness or lack of knowledge about food storage.

Look at these foods - they represent food value and money that has been wasted. (Show foods that are spoiling.)

This problem is something that affects people throughout the world. Decomposition, or spoiling is a natural process. It is a constant struggle between man, lower animals and organisms as to which will consume the food first.

What has caused these foods to spoil? What do we call this growth on bread? (mold) In what ways is mold helpful in food? (making cheese) List MOLD on board or overhead.

Would someone like to smell this? (fermenting fruit or fruit juice)
Can you describe the odor? (yeasty) Yeast which is present in the
air has caused this _____ to ferment. Sometimes fermentation is
desirable but not when it makes food unusable. List YEAST on board.

Another cause of spoilage is not always easy to see. Show milk
which has gone sour. Now smell it. This milk has soured because
of bacterial action. List BACTERIA on board.

Show tomato or other fruit or vegetable which is overripe to the
point of being unusable. Several days ago this (tomato) was fine
but something has happened to cause this food to deteriorate. A
chemical change caused by enzymes has occurred. List ENZYMES on
the board.

Food can also deteriorate due to cuts, bruises, insect infestation
and disease. These need not be listed on board.

The first three causes, molds, yeasts and bacteria are micro-
organisms (microscopic living organisms). Molds and yeasts are
generally thought to not be particularly harmful but bacteria can
and does cause serious illness.

You can see then that when we talk about food spoilage that we are
talking about the possibility of illness as well as money wasted.

**EVALUATIVE
ACTIVITY:**

Discuss Assignment No. 3

What is the cooperative extension service? (Teacher can discuss)
How will you proceed with assignment - discuss materials available
for research.

**SUGGESTED
EXTRA
ACTIVITY:**

Try to identify mold, yeast, and bacteria under microscope.

Certain foods need special care to prevent bacterial food poisoning -
eggs and egg-rich foods, meat, fish and poultry. Make a chart or
poster for the room depicting these hazards.

Analyze the storage space in your kitchen. Look for wasted storage
space and inadequate storage space. Make suggestions to improve
storage.

Look through homemaking magazines for ideas for "ideal" kitchen
storage. What are some of their suggestions?

Keep a running list of food items that are thrown away at your
house for one week. Ask your mom to help you keep track during the
day. An especially good time to do this is during refrigerator
cleaning time. Estimate the cost of the waste and the reason for
the waste and what could be done to prevent future waste?

Example:

<u>Item</u>	<u>Amount Discarded</u>	<u>Approx. Cost</u>	<u>Reason Discarded</u>
Parsley	3/4 bunch	7¢	I only need a little for a particular recipe

What could be done to prevent this from happening again?

It would be so much more practical to raise a decorative parsley plant so I could cut off only what I need - I always feel so guilty about throwing away so much but I really can't use the quantity I have to buy.

Explore these methods of food preservation:

- a) freeze-drying
- b) dehydro-freezing
- c) dehydration
- d) fermentation
- e) irradiation
- f) chemical additives
- g) preservatives

Explore the idea of controlling the environment to preserve food. Find information on the use of inert nitrogen in transporting fruits and vegetables.

What reasons can you give for world food shortage? Find newspaper or magazine articles to support your ideas.

What are scientists doing to prevent a world food shortage?

How is food preserved for space flights? Campers and hikers?

What is incaparina? How, where and why is it used?

How do industrial wastes contaminate food?

SUPER
EXTRA
CREDIT:

1. Call and invite one of the following people to come and speak to the class. After the date is set, send a list of suggested questions to this person to answer.
 - A. Joanne Emrich - consumer specialist - F.D.A., Seattle
 - B. Cooperative Extension Service
 - C. Washington Natural Gas
 - D. Puget Power
2. Explore a career with any of the above agencies (F.D.A. sheet included in Pak)

ASSIGNMENT NO. 3

1. You are working as a volunteer with low income families aiding an extension worker to prepare programs to help people manage their food resources wisely. During the summer you will present these topics:
 - a. Types of containers used for wrapping and storing food. Analyze according to cost, reusability, moisture and vaporproof qualities. Discuss types of foods to store in each.
 - b. Pointers on using your refrigerator and freezer to best advantage. Discuss preparation of foods for freezing. Demonstrate drug-store wrap and butcher wrap. Discuss freezer burn.
 - c. Discuss bacterial food poisoning. Investigate causes, symptoms, and control of foodborne illnesses.
 - d. Discuss storage of fresh vegetables and fruits.
 - e. Storage of leftovers - ways to use leftovers. Discuss concept of "planned overs".

Assign a topic to a group of students. Present the topic as you would present it to low-income adults. Keep the ideas lively but simple. Strive for a feeling of informality and concern for your students. Have your fellow students in the class judge your effectiveness.

- 1) Bulletin: "Keeping Food Safe To Eat"
A Guide For Homemakers
U.S. Department of Agriculture
Home and Garden Bulletin No. 162

For Kit this should be ordered in quantity---probably 30 at 10¢ each or could maybe get from extension here in Seattle. The same for "Conserving the Nutritive Value of Foods" and "Vegetables in Family Meals."

- 2) Bulletin: "Smart Shopper Food Tip -- Summer Vegetables
U. S. Department of Agriculture
Agricultural Marketing Service
Washington, D.C. 20250

- 3) Bulletin: "Perishable Foods Chart"
How to Keep them at their Peak in Appearance,
flavor, and nutrition
Storing Perishable Foods in the Home
Home and Garden Bulletin No. 78
U. S. Dept. of Agriculture

LESSON 4

- CONCEPT:** Trimming fruits and vegetables contributes to vitamin losses.
The method of food preparation affects the retention of nutrients.
- MATERIALS:** Chalkboard and chalk or overhead, grease pencil, acetate
Assorted foods texts
Cookbooks
Conserving the Nutritive Value of Foods, U.S.D.A. House and Garden
Bulletin No. 90
Vegetables in Family Meals, U.S.D.A. House and Garden Bulletin No. 105
- PROCEDURE:** *O.K., we've planned, purchased and stored our food and now we're at the second best point next to eating and that is preparing the food to eat.*
- From our study of nutrition we all know that there are 5 nutrients besides water and they are -- who can give me the names?*
- List on board or overhead:
- PROTEIN, FATS, CARBOHYDRATES, VITAMINS, AND MINERALS
- Proteins, fats, and carbohydrates are very stable and are not particularly affected by cooking. Minerals are more stable and vitamins are least stable.*
- What does the word "stable" mean? (Doesn't move around - is not easily lost - stays in one place)*
- Since basically only two nutrients are easily lost from foods let's explore how and why they get lost and what we can do to prevent this from happening. Since most vegetables contain generous amounts of vitamins let's use the preparation of vegetables to learn the principles of nutrient conservation.*
- EVALUATIVE
ACTIVITY:** Teacher demonstration or class demonstration of topics - From personal experience I found that student demonstrations of these topics did not work particularly well - they get so involved with the food itself that they forget the subject matter. Even though the students had plenty of resources they did not really know what they were looking for. This is a matter of preference for the teacher. Some classes might do very well with this type of assignment. Another factor is time - student demonstrations often drag. Although it's more work for the teacher, I did lots of demonstrations this year and students commented that they learned a lot and that they enjoyed the demonstrations.

TOPICS

1. Trimming fruits and vegetables to conserve nutrients - discuss tools
2. Cooking
 - a. Boiling of canned vegetables
 - b. Panning of fresh vegetables. Can do Japanese type dishes. Discuss baking.
 - c. Pressure cooking
 - d. Boiling frozen vegetables - Steaming (show equipment)
 - e. Types of cookware and effect on nutrient retention, if any. Discuss "waterless" cookery.
 - f. Dehydrated vegetables.
 - g. Use of microwave oven in vegetable cookery:
 - 1) Cooking in plastic pouch
 - 2) Baking, boiling, etc.
 - h. Deep fat frying - a vegetable fondue is a great way to show this

EVALUATIVE ACTIVITY: From the teacher demonstration make up 2 multiple choice questions on retaining nutrients in food. Have class spell down using questions.

SUGGESTED EXTRA ACTIVITY:

Prepare a vegetable dish at home using principles you learned from teacher demonstration.

RETENTION OF NUTRIENTS IN VEGETABLE COOKERY

These principles should be discussed during the demonstrations.

1. Nutrients in foods vary greatly in their stability.
2. Vitamin C (ascorbic acid) is soluble in water; air and heat hasten its loss.)
3. Measures that protect vitamin C usually protect other nutrients.
4. Vegetables are trimmed to remove damaged leaves, bruises and inedible parts.
5. Different parts of a plant differ in nutrient content.
6. Trimming is worthwhile if it makes the nutritious parts of the vegetable more acceptable to the family.
7. Outer, green leaves of lettuce and cabbage have more food value than inner leaves.
8. Losses of vitamin C and A occur when vegetable tissues are bruised - use sharp blade for trimming.
9. Vegetable cookery: Reduce amount of water, length of cooking time, amount of surface area exposed.
10. "Waterless" cookery (actually a misnomer) conserves nutrients no better than cooking vegetables quickly in small amounts of water because "waterless" cookery depends on longer cooking, thus losing nutrients.
11. Most vegetables are best cooked in a covered pan, in small amounts of water - for short periods of time.
12. Boiling root and tuber vegetables in their skins retains more vitamins than cooking them pared and cut.
13. Paring excess amounts of vegetables and fruits removes valuable nutrients lying directly under the skin.
14. Panning (cooking in covered frying pan with a small amount of fat) is an excellent way of conserving nutrients in succulent vegetables.
15. Baking conserves nutritive value of vegetables well.
16. Pressure cooking conserves nutrients well if the cooking period is carefully timed.
17. Special equipment is not necessary for cooking vegetables properly - a utensil with a tight fitting lid heavy enough to prevent escape of vapor and steam is best.
18. The material from which a utensil is made is not important in conserving nutritive value.

LESSON 5

CONCEPT: Preparation of vegetables to conserve nutrients and minimize waste.

MATERIALS: A ~~food~~ lab work plan. (Use the one you normally use.)

PROCEDURE: *Now, you will have the opportunity to put your knowledge about conserving nutrient values to work.*

**EVALUATIVE
ACTIVITY:**

Plan a vegetable plate lunch. Choose a sauce or garnish to accompany the meal and a quick bread or crackers to accompany. Serve at least four vegetables. Prepare your market order and work plans for preparation day. Objective is to prepare vegetables to conserve nutrients, color, texture, and flavor and to order and prepare food with minimum waste.

SUGGESTED

EXTRA

ACTIVITIES:

Plan three dinner menus which would provide "planned overs" for three other lunches or dinners. Use three different types of meat. Write the recipe for each of the "planned overs."

Prepare one of the "planned over" recipes for your family for a home project.

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2. "Money Management - Your Food Dollar", edited by Money Management Institute, 1972
3. "Food Is More Than Just Something To Eat", U.S. Food & Drug Administration